AD/TD Joint Projects Meeting
Wednesday, 1 December 2004, 1:15 PM
Club 157, Trailer 157

Present: Paul Czarapata, Hank Glass, Dave Harding (scribe), Peter Garbincius, Gregg Kobliska, Jeff Spalding, Rich Stanek, John Zweibohmer

Review of Tasks and Priorities

Linac Power amplifier tubes (#285)
A tech from PPD was expected to start this week, but discussions continue on the best balance between skill level and availability. Dave's assessment is that a 2-D person sooner is better than a 3-D person later.

Booster kickers (#305, #364)
With no spare kickers for the Booster extraction and two Tevatron functions, AD panicked and decided to build spares themselves rather than transfer the process to TD in an orderly fashion. A TD technician will help and TD process engineering people will try to document the assembly. As soon as the spares are built, tooling and parts will be moved to IB2 and TD will build some more spare Booster kickers.

The drawing is almost ready to be released for the square beam tube to increase the aperture in the Booster kickers for the Proton Plan. It is plausible to get these in time for the 2005 shutdown. Jim Lackey has requested some minor changes in the connection of the cables to the magnet for improved reliability.

OrBump (#203)
The first magnet has had vacuum leak problems at a Peek feedthrough. AD will test the magnets with a pulsed power supply that can match the operational waveform but not the repetition rate.

Booster trim package (#291)
Work is proceeding actively, with a weekly meeting. The design will incorporate horizontal and vertical dipoles, normal and skew quadrupoles, and normal and skew sextupoles all in one package. We expect that the BPM will move inside the magnets to provide more longitudinal space. The whole thing, with vacuum tube connected by flanges, will be installed as a unit, rather than the current system of strapping multiple individual coils around the beam tube. This will ease assembly, increase reliability and reproducibility, and reduce radiation exposures in the tunnel. The BPM design should be reviewed by someone from Instrumentation.

Main Injector/Tevatron Lambertson spares (#181)
The first spare is on the test stand at MTF. Work is resuming on assembly of the second magnet. Coil winding on the third and fourth is planned for December to get them out of the way before the WQB conductor and tooling arrive in early January. It was agreed that the third and fourth magnet could be treated as priority 3.

Wide gap trim for P-Bar (#371)
The task of opening the gap of a trim dipole for P-Bar to assist in the D/A line had just been proposed the day before the last meeting. The magnet was delivered that Friday and has been installed.

Debuncher extraction kicker (#225)
Chris Jensen's advice is that any modification will have an impact on the electrical properties requiring extensive tuning, and that therefore we should build new magnets that meet the needs. The next meeting is scheduled for 10 December.

Separator facility (#338)
Condition existing separators (#337)
Separator R&D (#265)
HV Power supplies (#377)
TD is now providing engineering, process engineering, and technician effort on the HV power supply assembly. As noted last time, of the six existing separators that are not installed, two will remain as spares (as they are now), two will be conditioned so they are ready for installation in the 2005 shutdown, and two are available for R&D on electropolishing electrodes or titanium electrodes. If performance can be improved, more might be installed in 2005. Retrofits of installed separators would be considered. A decision is needed around the end of 2005 on the separators for BTeV. The quote on titanium separators was beyond the budget for production, so alternative fabrication processes are being explored. Replacements for the problematic ceramic feedthroughs are another R&D target.

The ultrasonic cleaner procurement is on track, with qualification at the vendor planned for January.

The need for the contract technicians funded by AD needs to be reviewed. AD has not budgeted for their continuing beyond the initial year.

Spare 2-m solenoids for e-cool (#342)
There is an inconsistency in the reporting of M&S costs for this. Dave will look into it.

WBS issues

TD's reorganization of its WBS is complete. Most of the 30.8 tasks will move to 30.9 with an organization that matches the current LWWBS. TD still has some confusion with respect to support for beam lines, but will ask when the issue comes up.

New jobs

Synchrotron light monitor (#370)
TD is preparing to modify one Tevatron quadrupole and a spare to accommodate the synchrotron light monitor according to Mike Church's specification. TD will provide the space in the magnet, a moveable mirror, and a transparent port. AD has had some discussion about the preferred mirror location, noting that it is different for different purposes. The second use (abort gap monitoring) will probably be accommodated with a separate device in a warm section that does not require TD work.

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